

## **Appendix E-1-B**

### **Air Resources Board Bulk Sampling at Quarry Entrance**





Winston H. Hickox  
Secretary for  
Environmental  
Protection

## Air Resources Board

Alan C. Lloyd, Ph.D.  
Chairman

2020 L Street • P.O. Box 2815 • Sacramento, California 95812 • [www.arb.ca.gov](http://www.arb.ca.gov)



Gray Davis  
Governor

### MEMORANDUM

TO: Todd Wong, Manager  
Emissions Evaluation Section  
Stationary Source Division

FROM: George Lew, Chief *George Lew*  
Engineering and Laboratory Branch  
Monitoring and Laboratory Division

DATE: September 14, 1999

SUBJECT: RESULTS OF BULK SAMPLING AT WEBER CREEK QUARRY ENTRANCE  
AND WILD TURKEY DRIVE QUARRY

This memorandum transmits the results for bulk samples taken at the Weber Creek Quarry (WCQ) and at the quarry on Wild Turkey Drive (WTDQ). These samples were collected by ARB staff and analyzed by RJ Lee using ARB Test Method 435 (TM435).

In May 1999 ARB staff collected four bulk samples at the entrance to WCQ following the requirements set out in TM435. All four samples had a chrysotile asbestos concentration of less than 1%, (See Attachment 1). Two of the samples had a concentration of 0.25%. No asbestos was found on one sample. The fourth sample had 0.75%. Minimum detection limit of TM435 is 0.25% asbestos. Attachment 2 contains RJ Lee's report.

Staff took three bulk samples at WTDQ. You informed us that this quarry had a deposit of tremolite asbestos. We did not collect representative samples as required by TM435 but rather collected samples that are suspected to be tremolite, the purpose is to verify the presence of tremolite asbestos. Ron Churchill, a registered Geologist from the Department of Conservation's Division of Mines and Geology accompanied ARB staff to the quarry to identify the tremolite veins. Staff took samples at three different veins within the quarry. The asbestos concentrations for the three samples were 90.75%, 28.5%, and 83%, (See Attachment 1). RJ Lee reported (Attachment 2) each sample contained tremolite.

If you have questions or need further information, please contact me at 327-0900.

Attachments (3)

cc: Bill Loscutoff

California Environmental Protection Agency

Printed on Recycled Paper

E-1-B-1



Attachment 1  
Results of ARB Test Method 435 Analysis

Log	Sample	Description	Asbestos	Asbestiform
#	#		Concentration	
Wild Turkey Drive				
1	WTDQ-1	Vein on South side of quarry	90.75%	Tremolite
2	WTDQ-2	Vein on West side of quarry	28.5%	Tremolite
3	WTDQ-3	Vein on North side of quarry	83%	Tremolite
Weber Creek Quarry				
WCQB-9991	1	Ten random grab samples	0.25%	Chrysotile
WCQB-9992	2	Ten random grab samples	0.75%	Chrysotile
WCQB-9993	3	Ten random grab samples	0.25%	Chrysotile
WCQB-9994	4	Ten random grab samples	ND	

ND means non-detected  
Minimum detection Limit is 0.25%



Attachment 2  
RJ Lee Report for Weber Creek Quarry





# RJ LeeGroup, Inc.

# Fax Transmittal

530 McCormick Street San Leandro, CA 94577  
(510) 567-0480 • Fax (510) 567-0488

TO: James E. McCormick

Company: California Air Resources Board

FAX: (916) 263-2067

From: Scosha Brewer

Date: Thursday, April 29, 1999

RE: ~~C-99-031~~  
AOC904222-PC  
~~C-99-031~~ C-79-089

Total Number of Pages Being Transmitted (including cover page):

4

## MESSAGE:

Analysis Requested: PLM NESHAPS-40

Number of Samples Received: 4

Number of Samples Analyzed: 4

Comments:

# RJ LeeGroup, Inc.

530 McCormick Street • San Leandro, CA 94577  
510/567-0480 • FAX 510/567-0488

April 29, 1999

Mr. James E. McCormick  
California Air Resources Board  
P.O. Box 2815  
2020 L Street  
Sacramento, CA 95812

RE: PLM Point Count Asbestos Results for Samples as Shown on Table I  
RJLeeGroup, Inc. Job No.: AOC904222-PC  
Client P.O./Job Number: N/A  
Client Job Name/Location: ~~C-99-031~~ C-99-089

Dear Mr. McCormick:

Enclosed are the results from the polarized light microscopy (PLM) asbestos analysis of the above referenced samples. Samples were analyzed in accordance with guidelines set forth in the State of California, Air Resources Board (ARB), Test Method 435, Determination of Asbestos Content of Serpentine Aggregate (06/06/91).

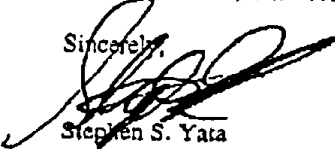
Table I lists each sample identification number, gross sample description, type(s) and concentration of asbestos, type(s) and concentration of nonasbestos fibers, major components and concentration of nonfibrous material (NFM), sample run date, analyst, and the number of asbestos points counted in 400 total points. Asbestos concentrations are given in percents to the nearest 0.25%.

The ARB Method 435, Section 8.3 lists two exceptions to the point count rule. Exception I states: "If the sample is suspected of containing no asbestos a visual technique can be used to report that the sample does not contain asbestos". If the sample is point counted, and asbestos is observed but not counted, the sample will be reported as containing < 0.25% asbestos. Exception II states: "If the sample is suspected to have an asbestos content in excess of ten percent, a visual technique can be used to report that the sample contains greater than ten percent asbestos." In the case of Exception II, the visual technique allowed in the National Institute of Standards and Technology's (NIST) National Voluntary Laboratory Accreditation Program (NVLAP), Bulk Asbestos Handbook (NIST publication number NISTIR 88-3879, 10/88) will be followed. If either exception is used it will be noted under the Asb/Points category of Table I.

RJ Lee Group, Inc. is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP) (NVLAP Participant Number 1208-2) for bulk asbestos fiber analysis (PLM), and by the California Department of Health Services, Environmental Laboratory Accreditation Program (CALELAP) for bulk asbestos analysis. Neither the NVLAP Accreditation of this laboratory nor this report may be used to claim product endorsement by NVLAP or any agency of the U.S.

These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions and no responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RJ Lee Group will store the samples for a period of ninety (90) days before discarding. A shipping and handling fee will be assessed for the return of any samples.

Sincerely,

  
Stephen S. Yata  
Geologist

SSY/sjb

Monroeville, PA • San Leandro, CA • Washington, DC • Houston, TX • Richland, WA

E-1-B-5

# Test Report - California Air Resources Board

Polarized Light, Point Count Analysis ARB Method 435

## Project AOC904222-PC

Sample Number	Client Sample Number	Asbestos										Nonasbestos					Run Date
		Chrysotile	Amosite	Crocidolite	Anthophyllite	Tremolite	Actinolite	Cellulose	Mineral Wool	Glass	Fibers	Fibers	Synthetic	Other	Fibers	Material	
1687512CPL Grey soil	WCQB-9991-1	0.25 %	-	-	-	-	-	-	-	-	-	-	-	-	-	99.75 %	4/29/99
					NFM:		Misc. Part.										SSY
1687513CPL Grey soil	WCQB-9992-2	0.75 %	-	-	-	-	-	-	-	-	-	-	-	-	-	Asb/Points 0/400	4/29/99
					NFM:		Misc. Part.										SSY
1687514CPL Grey soil	WCQB-9993-3	0.25 %	-	-	-	-	-	-	-	-	-	-	-	-	-	Asb/Points 3/400	4/29/99
					NFM:		Misc. Part.										SSY
1687515CPL Grey soil	WCQB-9994-4	<0.25 %	-	-	-	-	-	-	-	-	-	-	-	-	-	Asb/Points 1/400	4/29/99
					NFM:		Misc. Part.										SSY
Layer Content:	<0.25% Chrysotile (seen But Not Counted)															Asb/Points 0/400	

11-B-6

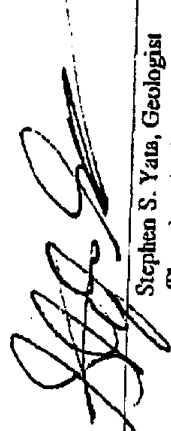
Samples received on: Friday, April 16, 1999

RJ Lee Group, Inc.  
Bay Area Lab

530 McCormick Street  
San Leandro, CA 94577

Page: 1 of 1

Authorized Signature



Date

Stephen S. Yata, Geologist  
Thursday, April 29, 1999

Phone (510) 567-0480  
Fax (510) 567-0488

**CHAIN OF CUSTODY SAMPLE RECORD**

**Submitter:** James E. McCormack

WAS THE CHAIN OF CUSTODY SEAL INTACT ON SAMPLE CONTAINER?

RJ Lee Laboratory

D. Murr 4/16/99  
Signature/Date

Signature/Date \_\_\_\_\_

ACTION	given by and date/time	taken by and date/time
--------	------------------------	------------------------

taken by and date/time

UPS 4/15/99

P. Mr 4/16/99 @ 12:00

THE  
RESEARCH  
INSTITUTE  
FOR THE STUDY OF  
HUMAN DEVELOPMENT  
AND THE ENVIRONMENT  
AT THE UNIVERSITY OF  
TORONTO

Attachment 3  
RJ Lee Report for Wild Turkey Drive Quarry



# RJ LeeGroup, Inc.

530 McCormick Street • San Leandro, CA 94577  
510/567-0480 • FAX 510/567-0488

July 16, 1999

Mr. James McCormick  
California Air Resources Board  
Engineering & Laboratory Branch  
600 North Market Blvd  
Sacramento, CA 95834

RE: PLM Point Count Asbestos Results for Samples as Shown on Table I  
RJLeeGroup, Inc. Job No.: AOC907077-PC  
Client P.O./Job Number: ~~C-99-031~~ C-99-089  
Client Job Name/Location: ~~C-99-031~~

Dear Mr. McCormick:

Enclosed are the results from the polarized light microscopy (PLM) asbestos analysis of the above referenced samples. Samples were analyzed in accordance with guidelines set forth in the State of California, Air Resources Board (ARB), Test Method 435, Determination of Asbestos Content of Serpentine Aggregate (06/06/91).

Table I lists each sample identification number, gross sample description, type(s) and concentration of asbestos, type(s) and concentration of nonasbestos fibers, major components and concentration of nonfibrous material (NFM), sample run date, analyst, and the number of asbestos points counted in 400 total points. Asbestos concentrations are given in percents to the nearest 0.25%.

The ARB Method 435, Section 8.3 lists two exceptions to the point count rule. Exception I states: "If the sample is suspected of containing no asbestos a visual technique can be used to report that the sample does not contain asbestos". If the sample is point counted, and asbestos is observed but not counted, the sample will be reported as containing < 0.25% asbestos. Exception II states: "If the sample is suspected to have an asbestos content in excess of ten percent, a visual technique can be used to report that the sample contains greater than ten percent asbestos." In the case of Exception II, the visual technique allowed in the National Institute of Standards and Technology's (NIST) National Voluntary Laboratory Accreditation Program (NVLAP), Bulk Asbestos Handbook (NIST publication number NISTIR 88-3879, 10/88) will be followed. If either exception is used it will be noted under the Asb/Points category of Table I.

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These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions and no responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RJ Lee Group will store the samples for a period of ninety (90) days before discarding. A shipping and handling fee will be assessed for the return of any samples.

Sincerely,

  
Scott Stotler  
Geologist

E-1-B-9

SS/sjb

Monroeville, PA • San Leandro, CA • Washington, DC • Houston, TX • Richland, WA

# Test Report - California Air Resources Board

## Polarized Light, Point Count Analysis Results

### Project AOC907077-PC

Sample Number	Client Sample Number	Chrysotile	Amosite	Crocidolite	Anthophyllite	Tremolite	Actinolite	Cellulose	Asbestos					Nonasbestos					Run Date
									Mineral	Fibrous	Glass	Fibers	Synthetic	Other	Fibrous	Glass	Fibers	Synthetic	
1692910CPL Grey powder	1-WTDQ-1	-	-	-	-	90.75 %	-	-	-	-	-	-	-	9.25 %	7/14/99	SS	Asb/Points 363/400		
1692911CPL White powder	2-WTDQ-2	-	-	-	-	28.5 %	-	-	-	-	-	-	-	71.5 %	7/14/99	SS	Asb/Points 114/400		
1692912CPL White powder	3-WTDQ-3	-	-	-	-	83 %	-	-	-	-	-	-	-	17 %	7/14/99	SS	Asb/Points 332/400		

E-1-B-10

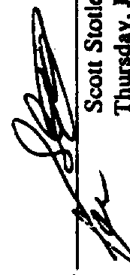
Samples received on: Tuesday, July 6, 1999

RJ Lee Group, Inc.  
Bay Area Lab

530 McCormick Street  
San Leandro, CA 94577

Page: 1 of 1

Authorized Signature



Scott Stotler, Geologist  
Thursday, July 15, 1999

Phone (510) 567-0480  
Fax (510) 567-0488



CHAIN OF CUSTODY SAMPLE RECORD	
Project #:	C-99-031
	Submitted by: James E. McCormack

Submitted by: James E. McCormack

## comments

AMERICAN

ARB		RJ Lee Laboratory	
yes	Jones E. McC... 7/2/99		
(Yes/No)	Signature/Date	(Yes/No)	Signature/Date

ACTION	given by and date/time	taken by and date/time
X FER	<i>James E. Miller</i> 7/2/99	UPS 7/2/99
X FER	UPS	C. SPAIN @ RJLEGG <i>C. Spain</i> 7/6/99

